

## SCHOTTKY BARRIER RECTIFIER

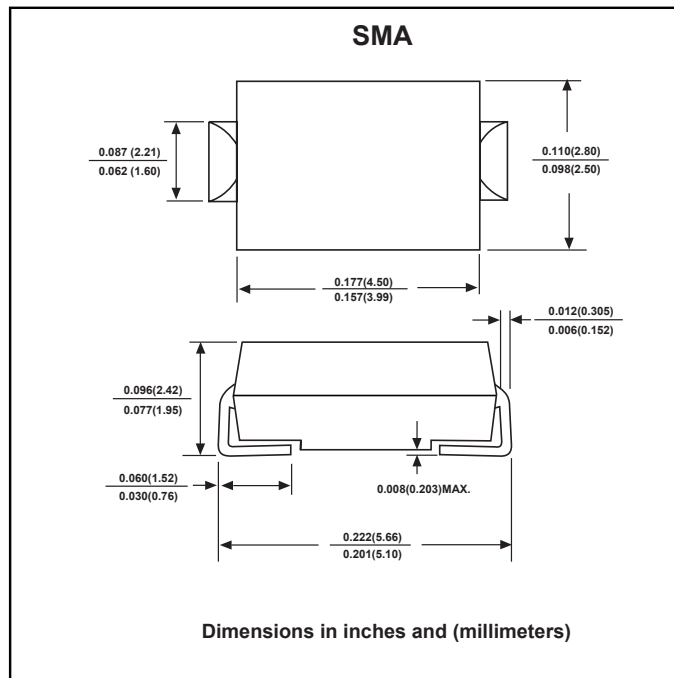
Reverse Voltage - 20 - 40Volts  
Forward Current - 1.0 Amp

### FEATURES

- The plastic package carries Underwriters
- Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction,majority carrier conduction  
Low power loss,high efficiency Built-in strain relief,  
ideal for automated placement  
High forward surge current capability
- High temperature soldering guaranteed:250 °C /10  
seconds at terminals

### MECHANICAL DATA

- Case: JEDEC SMA(DO-214AC) molded plastic body
- Terminals: leads solderable per MIL-STD-750,  
Method 2026
- Polarity: Color band denotes cathode end Mounting  
Position: Any
- Weight:0.003 ounce, 0.093 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase half-wave 60Hz,resistive or inductive load,for current capacitive load derate by 20%.

	SYMBOLS	SS5817	SS5818	SS5819	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	VOLTS
Maximum RMS voltage	$V_{RMS}$	14	21	28	VOLTS
Maximum DC blocking voltage	$V_{DC}$	20	30	40	VOLTS
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_L=90\text{ }^\circ\text{C}$	$I_{(AV)}$	1.0			Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25.0			Amps
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.450	0.550		Volts
Maximum DC reverse current $T_A=25\text{ }^\circ\text{C}$ at rated DC blocking voltage $T_A=100\text{ }^\circ\text{C}$	$I_R$	1.0 10.0			mA
Typical junction capacitance (NOTE 1)	$C_J$	110.0			pF
Typical thermal resistance (NOTE 2)	$R_{qJA}$	50.0			$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +125			$^\circ\text{C}$

**Note:** 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2 P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

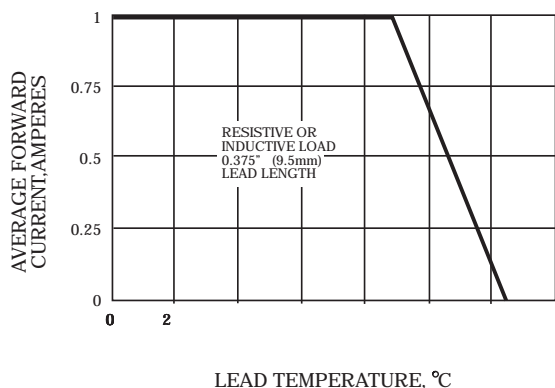


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

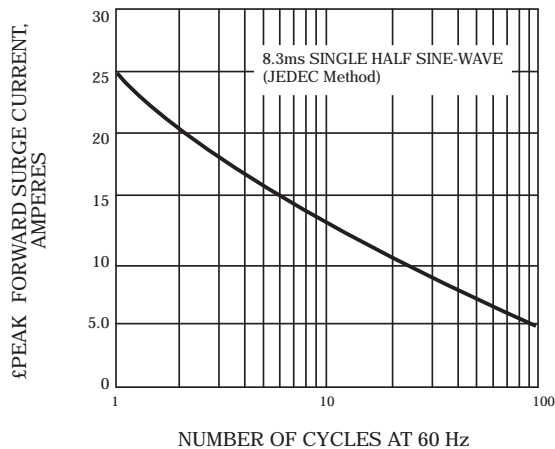


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

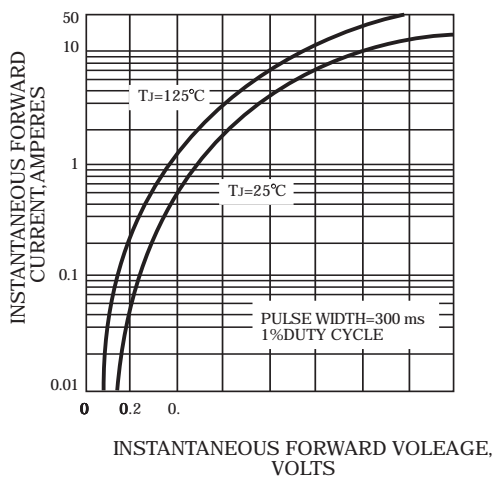


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

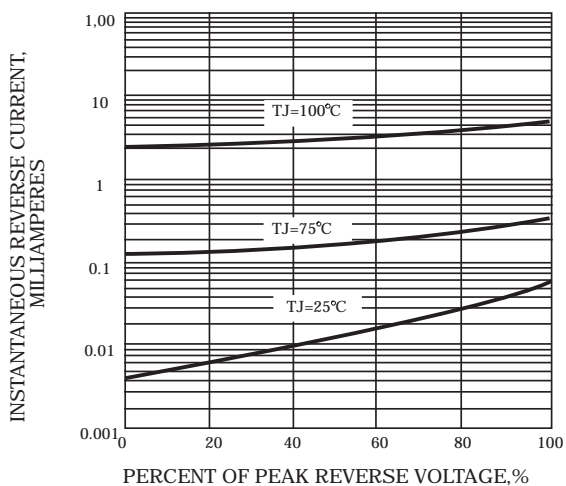


FIG. 5-TYPICAL JUNCTION CAPACITANCE

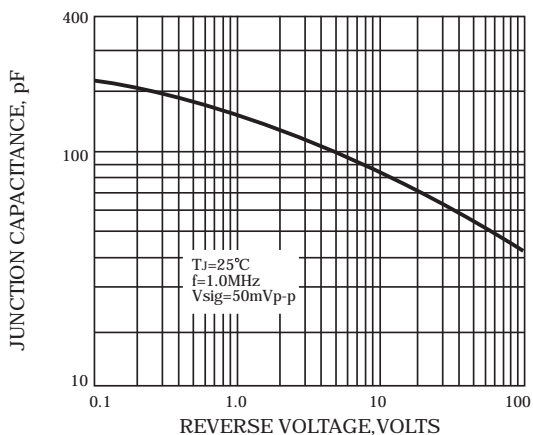


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

